



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,507	01/09/2006	Christoph Nemmaier	P05,0069	9934
26574	7590	03/28/2011		
SCHIEF HARDIN, LLP PATENT DEPARTMENT 233 S. Wacker Drive-Suite 6600 CHICAGO, IL 60606-6473			EXAMINER DONABED, NINOS J	
			ART UNIT 2444	PAPER NUMBER
			MAIL DATE 03/28/2011	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/527,507

Applicant(s)

NEMMAIER ET AL.

Examiner

NINOS DONABED

Art Unit

2444

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 46, 48-58, 60 and 61 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 46, 48-58, 60-61 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Transposition of Patent Drawing Review (PTO-940)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Response to Amendment

This communication is in response to Applicant's amendment dated 1/7/2011.

Claim(s) 46 and 61 has/have been amended. Claim(s) 46, 48-58, 60-61 is/are pending in the application.

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Regarding claim 46 and 61, the phrase "using said third identifier to route maintenance adjustment and error information to or from said object" is considered new matter as it is not explicitly or implicitly stated in applicant's specification. Claims 48-58 and 60 are rejected for being dependent on claim 46.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 46-55 and 57-61 rejected under 35 U.S.C. 103(a) as being unpatentable over Kageyama (United States Patent Application Publication 20030193685) in view of Barnard et al., (United States Patent No. 6,920,506) further in view of Yamamoto (United States Patent Application Publication 7054899) further in view of Danknick (U.S. Patent 6856416).

Regarding **Claim 46**,

Kageyama teaches a method for simplifying maintenance, adjustment, and error analysis of a data object in a printer or copier having a control panel, comprising the steps of: providing an external data processing unit external to the printer or copier and its control panel and which accesses the printer or copier via an interface as a first data line for said one of maintenance, adjustment, or error analysis of said data object; **(See abstract, figures 5-7, and paragraphs [0008] – [0012], Kageyama teaches an external print manger external to a printer which communicates with the printer controller over the network to manage the printer to cope with trouble in the printer.)**

providing in said printer or copier a first control unit and a second control unit and a second data line between said first and second control units for transferring data, **(See figure 7 and paragraphs [0077] – [0082], Kageyama teaches a print engine and a print controller within the printer connected by a data line)**

said first control unit being connected to said external data processing unit by said first data line, and said second control unit having at least one of said data objects

stored in a storage region thereof, **(See figure 7 and paragraphs [0077] – [0082], Kageyama teaches the first control unit connected to the total management service center which is external to the printer)**

Kageyama does not explicitly teach said data object comprising a parameter for control of the printer or copier, of said data objects not being controllable from the control panel of the printer or copier; associating a first identifier as a first network address with the first control unit and associating a second identifier as a second network address as a second control unit; and

associating a third identifier as a third network address which is different than said second identifier second network address with the data object to enable a simplified direct access to the data object by said external control unit for said of maintenance, adjustment, and error analysis of said at least one data object, a position of the data object in the network being determined by said third network address. ; the network addresses being hierarchically organized, the third network address of the object being hierarchically subordinate to the second network address, and the second control unit having a router using said third identifier to route maintenance adjustment and error information to or from said object.

Barnard teaches associating a first identifier as a first network address with the first control unit and associating a second identifier as a second network address as a second control unit; and **(See figures 7-9 and column 10 line 13 – column 11 line 17, Barnard)**

the network addresses being hierarchically organized, the third network address of the object being hierarchically subordinate to the second network address (**See column 11 lines 50 to column 12 line 42, Barnard teaches hierarchical mac addresses)**

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have known to combine the teachings of Barnard with Kageyama because both deal with printer management and setup. The advantage of incorporating associating a first identifier as a first network address with the first control unit and associating a second identifier as a second network address as a second control unit, the network addresses being hierarchically organized, the third network address of the object being hierarchically subordinate to the second network address, of Barnard into Kageyama is that information is transmitted from printer to the management device in response to information request message received along with IP address. An entry containing IP address and received information is created corresponding to the printer in a management directory thus making the system more robust and efficient. (**See column 1 lines 37 – column 2 line 34, Barnard**)

Barnard does not explicitly teach said data object comprising a parameter for control of the printer or copier, at least one of said data objects not being controllable from the control panel of the printer or copier;

associating a third identifier as a third network address which is different than said second identifier second network address with the data object to enable a simplified direct access to the data object by said external control unit for said of

maintenance, adjustment, and error analysis of said at least one data object, a position of the at least one data object in the network being determined by said third network address.

Yamamoto teaches said data object comprising a parameter for control of the printer or copier, data objects not being controllable from the control panel of the printer or copier; **(See column 8 lines 9-60, Yamamoto)**

associating a third identifier as a third network address which is different than said second identifier second network address with the data object to enable a simplified direct access to the data object by said external control unit ; **(See column 9 lines 10-45, Yamamoto)**for maintenance, adjustment and error analysis of said at least one data object, a position of the at least one data object in the network being determined by said third network address. ; **(See column 8 lines 9-60, Yamamoto)**

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have known to combine the teachings of Yamamoto with Kageyama, Barnard, and Yamamoto because both deal with management and control of a printer. The advantage of incorporating said data object comprising a parameter for control of the printer or copier, said data objects not being controllable from the control panel of the printer or copier; associating a third identifier as a third network address which is different than said second identifier second network address with the data object to enable a simplified direct access to the data object by said external control unit for said of maintenance, adjustment, and error analysis of said at least one data object, a position of the at least one data object in the network being determined by said third

network address of Yamamoto into Kageyama, Barnard is that Enables combination of multiple office apparatuses to implement workflow services thus making the system more robust and efficient. **(See column 1, Yamamoto)**

Yamamoto does into explicitly teach and the second control unit having a router using said third identifier to route maintenance adjustment and error information to or from said object.

Danknick teaches and the second control unit having a router using said third identifier to route maintenance adjustment and error information to or from said object.

(See claim1, figures 2-3, and column 3 line 45 - column 4 line 40, Danknick)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have known to combine the teachings of Danknick with Kageyama, Barnard, and Yamamoto because both deal with management and control of a printer and copiers. The advantage of incorporating the second control unit having a router using said third identifier to route maintenance adjustment and error information to or from said object of Danknick into Kageyama, Barnard is that it a high operational capability and reliability for performing a printing job is obtained and the dynamic load balancing in the system is possible since alternate printers are identified in case of malfunctioning of some printers thus making the system more robust and efficient. **(See column 1, Danknick)**

Regarding **Claim 47**,

Kageyama, Barnard, Yamamoto, Danknick teach the method according to claim 46 wherein the network addresses are hierarchically organized and the third network address is hierarchically subordinate to the second network address. **(See Column 11 Line 50 through Column 12 Line 12, Barnard)** see motivation for claim 46.

Regarding **Claim 48**,

Kageyama, Barnard, Yamamoto, Danknick teach the method according to claim 46 wherein the second network address is determined with aid of the third network address. **(See Column 11 Line 50 through Column 12 Line 12, Barnard)** see motivation for claim 46.

Regarding **Claim 49**,

Kageyama, Barnard, Yamamoto, Danknick teach the method according to claim 47 wherein a transfer path for access to the at least one data object is predetermined by a hierarchical position of the third network address. **(See figures 6-8 and column 9 line 34 – column 10 line 56, Barnard.)** see motivation for claim 46.

Regarding **Claim 50**,

Kageyama, Barnard, Yamamoto, Danknick teach the method according to claim 46 wherein data of the data object are read out from the storage region of the second control unit by the first control unit with aid of the third network address. **(See figures 9-13 and column 10 line 15 – column 11 line 56, Barnard.)** see motivation for claim 46.

Regarding **Claim 51**,

Kageyama, Barnard, Yamamoto, Danknick teach the method according to claim 46 wherein the first control unit and the second control unit respectively form a network node. **(See figures 1 and 9, Barnard)** see motivation for claim 46.

Regarding **Claim 52**,

Kageyama, Barnard, Yamamoto, Danknick teach the method according to claim 48 wherein the third network address comprises a sub-address of the second network address. **(See figures 7-10 and column 8 line 05 – column 9 line 35, Barnard.)** see motivation for claim 46.

Regarding **Claim 53**,

Kageyama, Barnard, Yamamoto, Danknick teach the method according to claim 46 wherein for the at least one data object a value of the at least one data object parameter is changed. **(See figures 9-13 and column 10 line 15 – column 11 line 56, Barnard.)** see motivation for claim 46.

Regarding **Claim 54**,

Kageyama, Barnard, Yamamoto, Danknick teach the method according to claim 46 wherein the control units are hierarchically organized, the second control unit being hierarchically subordinate to the first control unit, and the network address of the second

control unit being hierarchically subordinate to the network address of the first control unit. **(See figures 9-13 and column 12 line 35 – column 13 line 64, Barnard.)** see motivation for claim 46.

Regarding **Claim 55**,

Kageyama, Barnard, Yamamoto, Danknick teach the method according to claim 46 wherein third control unit is provided that is connected with the second control unit via a third data line and is hierarchically subordinate to the second control unit, the data object being read out by the third control unit via the third data line. **(See figures 7-10 and column9 line 15 – column 10 line 56, Barnard.)** see motivation for claim 46.

Regarding **Claim 57**,

Kageyama, Barnard, Yamamoto, Danknick teach the method according to claim 46 wherein data transfer over the first data line occurs with aid of the Simple Network Management Protocol. **(See Figure 9 and Column 11 Line 51 through Column 13 Line 12, Barnard)** see motivation for claim 46.

Regarding **Claim 58**,

Kageyama, Barnard, Yamamoto, Danknick teach the method according to claim 46 wherein routers are provided in the control units, the routers forwarding a read request to at least one network address hierarchically subordinate to the at least one

data object. **(See Figures 7-9 and Column 10 Line 51 through Column 11 Line 12, Barnard)** see motivation for claim 46.

Regarding **Claim 60**,

Kageyama, Barnard, Yamamoto, Danknick teach the method according to claim 46 wherein the external control unit comprises a personal computer with software. **(See figures 8-9, and column 11, Barnard.)** see motivation for claim 46.

Regarding **Claim 61**,

Claim 61 list all the same elements of **claim 46**, but in system form rather than method form. Therefore, the supporting rationale of the rejection to **claim 46** applies equally as well to **claim 61**.

1. Claim 56 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kageyama (United States Patent Application Publication 20030193685) in view of Barnard et al., (United States Patent No. 6,920,506) further in view of Yamamoto (United States Patent Application Publication 7054899) further in view of Danknick (U.S. Patent 6856416) further in view of Official notice.

Regarding **Claim 56**,

Kageyama, Barnard, Yamamoto and Danknick teach the method according to claim 46.

Examiner is taking official notice as to wherein the first data line comprises an HDLC network, and the second data line comprises a CAN network. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have known that multiple types of networks could be used for the first and second data lines depending on needs in order to make the system most efficient. The advantage of CAN is automatic 'arbitration free' transmission protocol. The advantage of HDLC is that the data is organized into a unit (called a frame) and sent across a network to a destination that verifies its successful arrival. The HDLC protocol also manages the flow or pacing at which data is sent.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any response to this Office Action should be **faxed** to (571) 272-8300 or **mailed** to:

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, Virginia 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to 3 whose telephone number is (571)270-3526. The examiner can normally be reached on Monday-Friday, 7:30 AM-5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn can be reached on (571) 272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/N. D./
Examiner, Art Unit 2444
/William C. Vaughn, Jr./
Supervisory Patent Examiner, Art Unit 2444